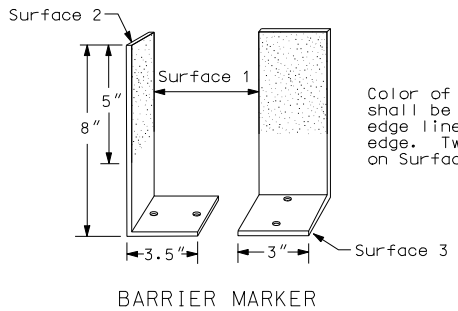
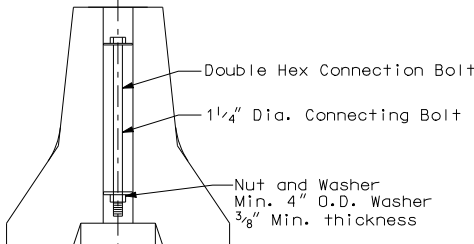
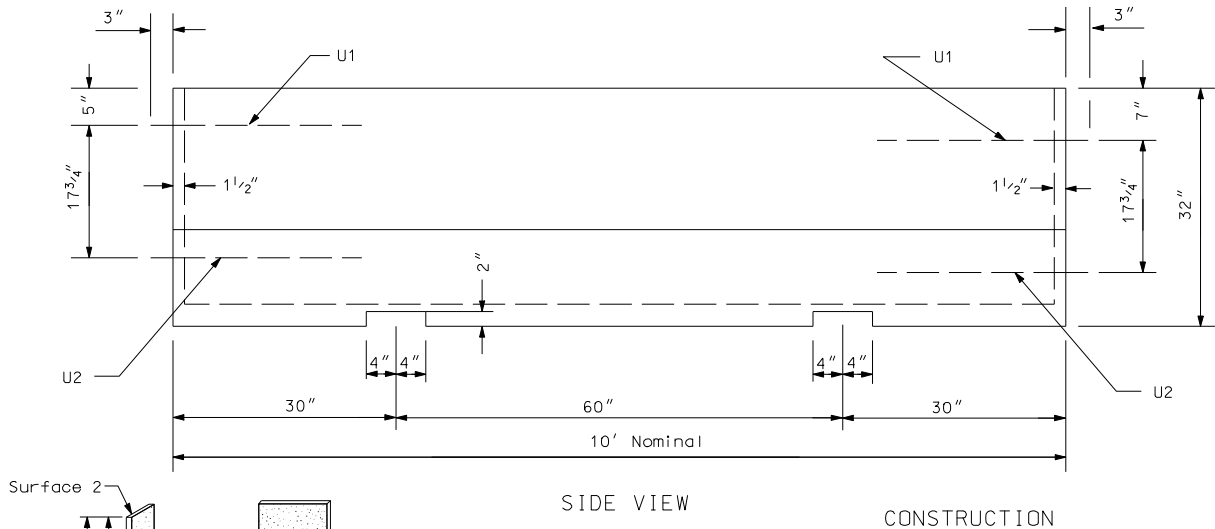
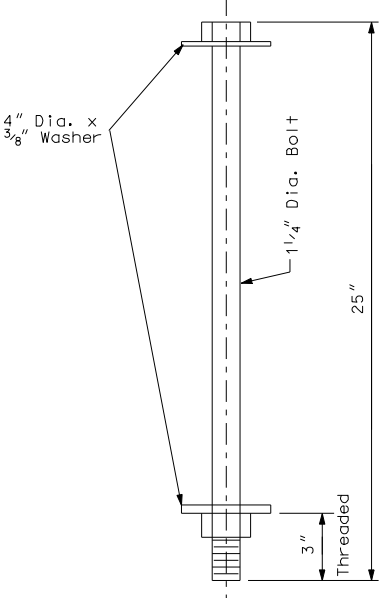
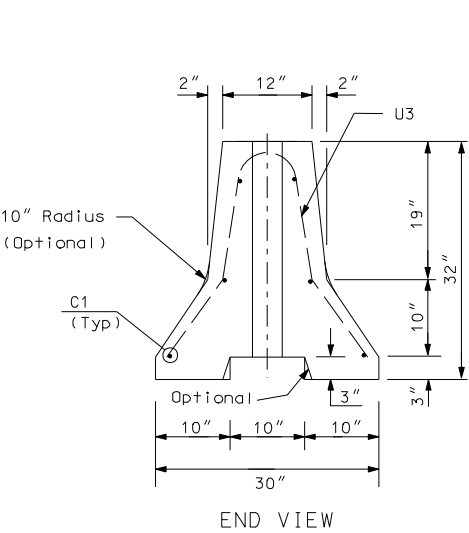
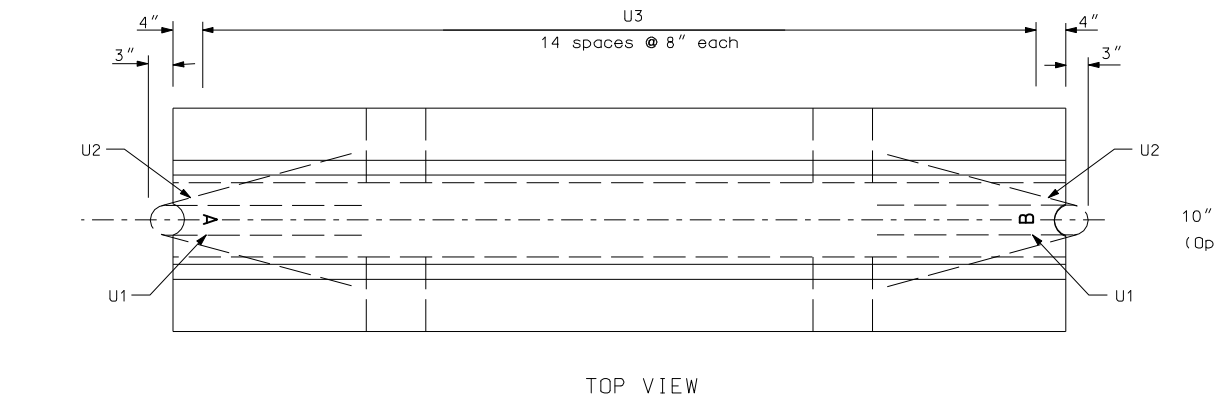


PORTABLE PRECAST CONCRETE MEDIAN BARRIER  
(TEMPORARY USAGE)

Notes:

1. All exposed hardware shall be galvanized as per ASTM A153, except for the loop inserts.
2. Concrete shall be Class AAE-3.
3. All steel shall conform to Section 612.
4. Barrier ends shall be imprinted A and B as shown with 4 inch letters. Field placement shall match the A end with the B end.
5. Barrier markers shall be placed at the center of the barrier at 20' centers.
6. Barrier sections shall be connected together with the 1 1/4" dia. A-307 double hex connecting bolt. The bottom nut and washer connection shall be maintained by the contractor for the duration of the barrier installation.
7. Barrier shall be placed such that openings between individual sections shall be kept to a minimum.



Color of reflective faces shall be the same as the edge line along barrier edge. Two way reflective on Surface 1 & 2.

MARKER BODY  
The marker shall be made of a high impact, weatherable engineering thermo-plastic material which conforms to the following:

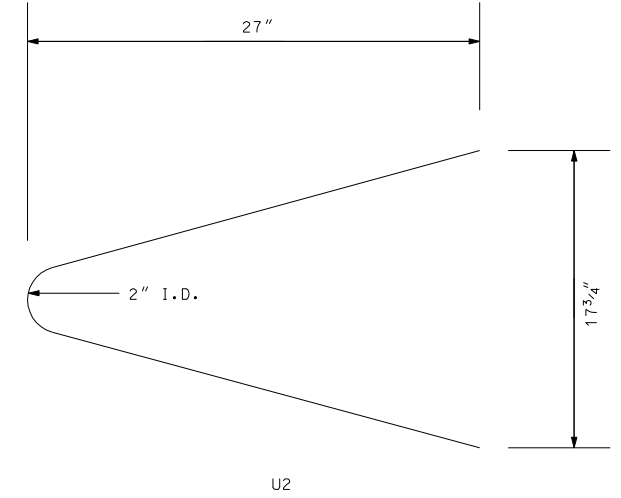
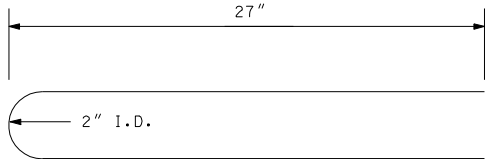
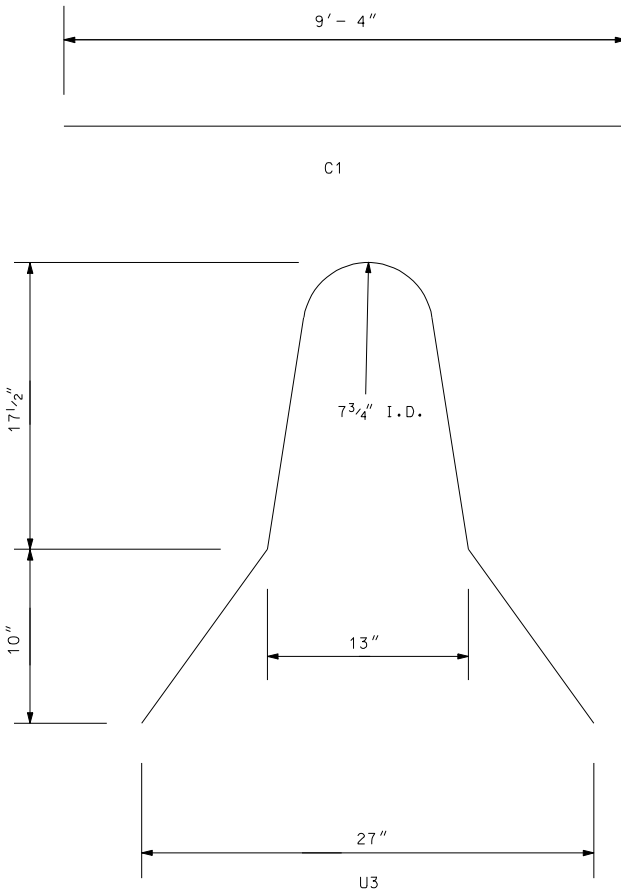
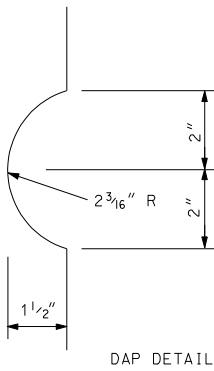
PROPERTY	RESULT	ASTM TEST METHOD
Thickness (min)	.090"	—
Tensile strength (min psi) @ yield	5,500	D638
Impact strength @ -20°F (ft-lbs/in of notch)	3.2	D256 Method A
Impact strength @ 73°F (ft-lbs/in of notch)	14.0	D256 Method A
Flexural strength, PSI 1/4" @ 73°F	8,000	D790
Flexural modulus, PSI 1/4" @ 73°F	300,000	D790
Elongation @ yield	30%	D638

REFLECTIVE TAPE  
The reflector shall be a retroreflective, acrylic microprism material with acrylic backing, 3" wide, providing the following minimum optical performance with an observation angle of 0.1° measured in candlepower:

ENTRANCE ANGLE	SPECIFIC INTENSITY
Yellow -4"	136
White -4"	200

ADHESIVE  
Markers shall be temporarily mounted to the portable concrete barrier with factory applied solid butyl rubber 1/8" thick, 2" wide on 2 1/4" wide release paper on surface 3.

BAR LIST				
MARK	SIZE	NO.	LENGTH	SHAPE
C1	4	6	9' - 4"	STRAIGHT
U1	4	2	4' - 8"	BENT
U2	4	2	4' - 10 1/4"	BENT
U3	4	15	5' - 4"	BENT



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-24-00	
REVISIONS	
DATE	CHANGE
11-17-00	Dimensions & Note 4
12-01-04	PE Stamp added

This document was originally issued and sealed by MARK S GAYDOS, Registration Number PE-4518, on 12/01/04 and the original document is stored at the North Dakota Department of Transportation